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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/622.432

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Kenji Niibori

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11/21/2006

FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER

RIELLEY, ELIZABETH A

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 11/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/622,432

Applicant(s)

NIIBORI ET AL.

Examiner

Elizabeth A. Rielley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 August 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

Amendment filed 7/26/06 has been entered and considered by the Examiner. Currently, claims 1-21 are pending in the instant application.

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/28/06 has been entered.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Fushimi et al (US 5905335).

In regard to claim 1, Fushimi et al ('335) teaches a vacuum container (figure 2; column 10 lines 30-37) having a first substrate and a second substrate arranged so as to face each other (2, 6; column 11 lines 26-38; see figure 2) as components comprising, within said vacuum container: a spacer (5; column 11 lines 39-52) supported on the first substrate or the second substrate so as to maintain an interval between the first substrate and the second substrate (see figure 2), the spacer having a height extending in a first direction substantially perpendicular to the planar surfaces of the first and second substrates and a length extending in a longitudinal direction substantially parallel with the planar surfaces (not numbered; see figure 2), the spacer also having a vertically extending surface extending in the first direction substantially perpendicular to the planar surface (not numbered; top of 5, see figures 2 and 26); and a supporting member extending from the vertically extending surface in the longitudinal direction and fixing the spacer within the vacuum container without the spacer contacting the supporting substrate (12; see figure 26; column 27 lines 21-44).

In regard to claim 2, Fushimi et al ('335) teaches the spacer is fixed to the substrate where the spacer is disposed, via the supporting member (12; see figure 26) provided at said spacer without contacting the substrate where said spacer is disposed (due to 12, see figure 26).

In regard to claim 3, Fushimi et al ('335) teaches supporting member (12) is connected to the substrate (2) by means of a first connecting member (1; see figure 2; column 11 lines 26-38).

In regard to claim 4, Fushimi et al ('335) teaches supporting member (12) is connected to said spacer (5) by means of a second connecting member (58; see figure 2; column 6 lines 26-32).

In regard to claim 5, Fushimi et al ('335) teaches a plurality of electron emission elements (1; column 11 lines 26-38) arranged on the first substrate; and an image display member arranged on the second substrate (7, 8; column 11 lines 26-38).

In regard to claim 6, Fushimi et al ('335) teaches spacer is disposed on wires for driving said plurality of electron emission elements arranged on the first substrate (abstract; 12; column 6 lines 26-32).

In regard to claim 7, Fushimi et al ('335) teaches the supporting member (12) is disposed outside of an electron emission region (25; see figures 12; column 6 lines 46-59).

In regard to claim 8, Fushimi et al ('335) teaches a vacuum container (figure 2; column 10 lines 30-37) having a first substrate and a second substrate arranged so as to face each other as components (2, 6; column 11 lines 26-38; see figure 2) comprising, within said vacuum container: a spacer disposed at the first substrate or the second substrate so as to maintain an interval between the first substrate and the second substrate (5; column 11 lines 39-52; see figure 2), the spacer having a height extending in a first direction substantially perpendicular to planar surfaces of the first and second substrates and a length extending in a longitudinal direction substantially parallel with the planar surfaces, the spacer also having a vertically extending surface extending in the first direction substantially perpendicular to the planar surfaces (not numbered; see figure 2); and a supporting member (12; see figure 26; column 27 lines 21-44) extending from the vertically extending surface in the longitudinal direction and fixing the spacer within the vacuum container so as to provide a gap (58; see figure 28; column 29 lines 60-64) between the spacer and the supporting substrate (see figure 28).

In regard to claim 9, Fushimi et al ('335) teaches spacer (5) is fixed to the substrate (150; column 29 lines 60-64; figure 28) where said spacer is disposed (see figure 28), via the supporting member (12) provided at said spacer with a gap (made by 58) with the substrate (150 via 12) where said spacer is disposed (see figure 28).

In regard to claim 10, Fushimi et al ('335) teaches supporting member (12) is connected to the substrate (11) by means of a first connecting member (16; see figure 4; column 12 lines 9-38).

In regard to claim 11, Fushimi et al ('335) teaches the supporting member (12) is connected to said spacer (5) by means of a second connecting member (58; figure 28; column 29 lines 60-64).

In regard to claim 12, Fushimi et al ('335) teaches supporting member (12) is connected to said spacer (5) by means of a second connecting member (58; see figure 2; column 6 lines 26-32).

In regard to claim 13, Fushimi et al ('335) teaches the spacer is disposed on wires for driving said plurality of electron emission elements arranged on the first substrate (abstract; 12; column 6 lines 26-32).

In regard to claim 14, Fushimi et al ('335) teaches the supporting member (12) is disposed outside of an electron emission region (25; see figures 12; column 6 lines 46-59).

In regard to claim 15, Fushimi et al ('335) teaches a method for manufacturing a vacuum container (figure 2: column 10 lines 30-37) having a first substrate and a second substrate arranged so as to face each other as components (2, 6; column 11 lines 26-38; see figure 2), and a spacer disposed at the first substrate or the second substrate within the vacuum container (5; column 11 lines 39-52), the method

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comprising the steps of: supporting the spacer on the first substrate or the second substrate so as to maintain an interval between the first substrate and the second substrate (see figure 2), the spacer having a height extending in a first direction substantially perpendicular to planar surfaces of the first and second substrates and a length extending in a longitudinal direction substantially parallel with the planar surfaces (not numbered; see figure 2), the spacer also having a vertically extending surface extending in the first direction substantially perpendicular to the planar surfaces (not numbered; see figure 2); and providing a supporting member extending from the vertically extending surface in the longitudinal direction (12; figure 26; column 27 lines 21-44) and fixing the spacer within the vacuum container so as to provide a gap (figure 28; gap made from 58; column 6 lines 26-32) between the spacer and the supporting substrate (see figure 28).

In regard to claim 16, Fushimi et al ('335) teaches an image display apparatus having a vacuum container (figure 2; column 10 lines 30-37) having a first substrate and a second substrate arranged so as to face each other as components (2, 6; column 11 lines 26-38; see figure 2), and a spacer (5), electron emission elements on the first substrate (1; column 11 lines 26-38); and an image display member arranged on the second substrate (7, 8; column 11 lines 26-38) that are disposed within the vacuum container (see figure 2), said method comprising the step of: manufacturing the vacuum container according to a method according to claim 15 (see above).

In regard to claim 17, Fushimi et al ('335) teaches the spacer (5) is disposed on wires for driving said plurality of electron emission elements arranged on the first substrate (abstract; 12; column 6 lines 26-32).

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In regard to claims 18 and 19, Fushimi et al ('335) teaches the supporting member includes a groove for receiving a longitudinal end of the spacer (57; figure 26; column 27 lines 58-61).

In regard to claims 20 and 21, Fushimi et al ('335) teaches the plurality of electron emission elements include a cold cathode (column 10 lines 38-40).

### *Response to Arguments*

Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Rielley whose telephone number is 571-272-2117. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair->



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*Examiner*

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**NIMESHKUMAR D. PATEL  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800**